The Department of Ecology
Hazardous Waste and Toxics Reduction Program

Property Managers Problem Waste Fact Sheets

November 1998

Publication Number 98-415

Problem Waste Checklist

Office, retail, and industrial tenants often produce some wastes that require special handling. Problem wastes may also be generated during remodeling, construction, demolition, and routine property maintenance activities. The following list is a starting point for thinking about hazardous materials, hazardous wastes, and other problem wastes that may be on your properties.

Problem wastes found during remodeling, construction, and routine property maintenance

- ❖ Asbestos (may be in ceiling tiles, floor tiles, pipe insulation, etc)
- ❖ Abandoned/unknown wastes
- ❖ Antifreeze
- ❖ Contaminated soils
- ❖ Cleaners/detergents/disinfectants
- ❖ Fluorescent light ballasts (PCBs and DEHP)
- ❖ Fluorescent light tubes
- ❖ Freon (refrigeration)
- ❖ Paint (leftover)
- ❖ Paint removal and lead based paint
- ❖ Solvents
- ❖ Stormwater and grit
- ❖ Underground storage tanks
- ❖ Used oil

Problem wastes generated by professional and office tenants

Architects	Ammonia (blueprinting), ink, solvent, glue
Dentists	Amalgam, lead foil/aprons, spent x-ray fixer, disinfectant, mercury (sharps and other biomedical waste also require special handling)
Medical clinics	Variety (solvent, medications, disinfectant)

General offices	Computers/monitors (lead in glass, heavy metals in circuit boards), batteries, cleaners, glue, ink, toner, solvents
Parking garages	Oily wastewater, detergent, gasoline and oil (spills), catch basin grit, maintenance supplies (in storage closets)
Retail/commercial tenants	Varies according to type of business

Problem wastes generated by retail/commercial/industrial tenants

Artists	Paint, solvent
Auto related	(Includes auto body, detailing, machine, transmission, and repair shops, service stations, and tire distributors) Wide variety of waste including: acetylene gas, aerosol sol vents, antifreeze, batteries, blasting waste, brake fluid, carbure tor cleaner, car wash water, catch basin sediment, caustic dip tanks, contaminated diesel and gasoline, cutting oil, machine coolant, oil, antifreeze filters, oil filters, fuel filters, paint, paint booth filters, contaminated shop towels, solvents, tank sludges, and other wastes
Beauty shops	(and nail salons) Dye, bleach, solvent, glue
Car washes	Detergent/water solution (cannot go to storm drains), catch basin grit
Carpet cleaners	Wastewater cannot go to storm drains or septic systems, spot cleaner
Contractors	Paint, treated wood, roofing waste, adhesive, solvent, acid
Dry cleaners	Dry-cleaning solvent, sludge and filters
Electroplaters	Acid, cyanide, solvent and other wastes
Equipment rental	(and repairs) Contaminated fuel, gasoline, used oil and solvent, aerosols
Floor strippers	Solvent
Furniture repair	(and construction) Glues, solvents, paints, paint booth filters, shop towels, stains
Gas stations	Contaminated fuel, absorbents
Jeweler	(and watch repair) Solvent, batteries, metals

Laboratories	Out-dated or contaminated chemicals, formaldehyde, reactive compounds, potentially explosive compounds, solvent, photo chemicals, oil, acids, caustics, disinfectants, toxic compounds
Machine repair	Oils, solvents, paints
Maintenance	Detergents, ammonia, acids, caustics, solvents
Manufacturing	Wide variety of possible wastes
Marinas	Blasting wastes, paint, batteries, solvents
Metal worker	(and machine shops) Machine coolants, cutting oils, solvents, acids, detergents
Mortuary	(and cemeteries) Formaldehyde
Painters	Paint, thinner, shop towels, other
Parking garages	Contaminated absorbents; oily water, washwater (cannot go to storm sewers)
Pest control	Unused products; empty containers
Photo processors	Unused developer, spent fixer
Printers	Inks, dyes, solvents, unused developer
Recyclers	Varies according to what is being recycled
Roofers	Asbestos felt may be a problem, liquid tar, solvents, adhesives
Screen printers	Inks, solvents, contaminated shop towels
Shoe repair	Solvents, glues
Swimming pool	(suppliers) Bleach, disinfectants
Transportation	(and related - See automotive)
Veterinarians	Outdated medications, disinfectants, biomedical wastes, aerosol solvents, x-ray fixer
Warehouses	(and suppliers) Discarded and damaged hazardous products
Welders	Flammable and oxidizing compressed gas containers, metals.

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Asbestos

Asbestos poses a health risk if disturbed and inhaled. Asbestos is commonly found in popcorn ceilings, furnace and plumbing insulation, siding, and floor tiles. If you're not sure if you have asbestos, qualified samplers can take a sample and analyze it for you.

Who regulates asbestos?

Local Air Pollution Control authorities and the Washington State Department of Ecology regulate the removal, encapsulation, and handling of asbestos. Asbestos should not be removed unless these requirements are followed. For information on asbestos removal, call the local air pollution control authority or the Department of Ecology Regional Office Air Program with jurisdiction in your county. The phone numbers are listed on this Fact Sheet.

Should I remove asbestos?

Asbestos that is in good condition does not have to be removed. If asbestos is damaged or will be disturbed during a remodeling or repair job, it should be removed or encapsulated.

Where can I dispose of asbestos?

You will have to get a removal and disposal permit from your local air authority or the Department of Ecology and follow the requirements for removing and properly packaging waste asbestos. Again, the phone numbers are listed on the back of this Fact Sheet.

Paperwork

Be sure to file necessary paperwork on asbestos removal. These include a notification form from your local air authority, a "Notice of Intent to Remove or Encapsulate Asbestos" from the Department of Labor and Industries, landfill disposal permits and receipts, and air monitoring results taken during and after removal.

Companies that remove asbestos

For a list of companies that offer asbestos removal services, look in the yellow pages of the telephone book under *Asbestos Abatement*. Make sure the company you choose is properly bonded and insured, and has handled projects like yours before.

Air Pollution Control Authority and EcologyContacts:

Benton County Clean Air Authority *(Benton County)*	Richland	(509) 456-2926
Northwest Air Pollution Authority *(Island, Skagit, Whatcom Counties)*	Mt. Vernon	(360) 428-1617
Olympic Air Pollution Control Authority *(Clallam, Grays Harbor, Jefferson, Mason, Pacific, Thurston Counties)*	Lacey	(360) 438-8768 or (800) 422-5623
Puget Sound Clean Air Agency *(King, Kitsap, Pierce, Snohomish Counties)*	Seattle	(206) 343-8800 or (800) 552-3565
Southwest Air Pollution Control Authority *(Clark, Cowlitz, Lewis, Skamania, Wahkiakum Counties)*	Vancouver	(360) 574-3058
Spokane County Air Pollution Control Authority *(Spokane County)*	Spokane	(509) 456-4727
Yakima Regional Clean Air Authority *(Yakima County)*	Yakima	(509) 574-1410 or (800) 540-6950
Ecology's Central Regional Office *(Chelan, Douglas, Kittitas, Klickitat, Okanogan Counties)*	Yakima	(509) 575-2490
Ecology's Eastern Regional Office *(Adams, Asotin, Columbia, Ferry, Franklin, Garfield, Grant, Lincoln, Pend Oreille, Stevens, Walla Walla, Whitman Counties)*	Spokane	(509) 456-2926
Ecology's Northwest Regional Office *(San Juan County)*	Bellevue	(425) 649-7000

Labor and Industry Contacts for Notification of Intent to Remove or Encapsulate Asbestos:

Region 1	Everett	(425) 416-3014
Region 2	Seattle	(206) 281-5476
Region 3	Tacoma	(253) 596-3912
Region 4	Olympia	(360) 902-5477
Region 5	East Wenatchee	(509) 886-6505
Region 6	Spokane	(509) 324-2552

To obtain a copy of the Hazardous Waste Services Directory, publication number 98-412, which lists companies that offer asbestos management, call (360) 407-6752.

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Abandoned and "Unknown" Wastes

Do you have a container of waste that someone left behind? Do you know what it is? Is it hazardous? You need to know. If you can't return the waste to the person or business that produced it, the waste is yours.

Different types of waste have different requirements for labeling, treating, storing, disposing, and transporting. For example, a container of waste solvent is handled differently than a container of waste antifreeze, even though both are hazardous waste. Under state and federal law, generators must identify waste hazards and share this information with employees, transporters, and facilities that treat or dispose of the waste.

Where do you start?

- If you are unable to get a tenant to identify and claim the waste, you must have the waste tested.
- In the meantime, before the laboratory analyses are back, the unknown waste should be stored and managed as if it were a dangerous waste. The waste should be stored so that accidental releases do not reach the environment.
- Label the container with the date of the sampling and the words "Waste Pending Analysis."
- Keep a log and record the date of discovery, the date samples were shipped to a testing facility, and testing facility information.
- If the test indicates that the waste is dangerous or hazardous, manage it according to the law.

Who can help you?

Laboratories that can analyze unknown wastes can be found in the yellow pages of the telephone book, under *Laboratories - Analytical* and *Laboratories - Testing*. Many of the waste management companies that are listed in the yellow pages can both test the waste and manage it for you.

Additional Phone Numbers

For additional information, contact your county or city government health department or a Washington State Department of Ecology Regional Office:

Northwest Regional Office	Bellevue	(425) 649-7000
Southwest Regional Office	Olympia	(360) 407-6300
Central Regional Office	Yakima	(509) 575-2490
Eastern Regional Office	Spokane	(509) 456-2926

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Antifreeze

Antifreeze is an ethylene glycol-based coolant used as a heat exchange medium in motor vehicle radiators, motorized equipment, and in other industrial processes. Used antifreeze is generally reclaimed on or off-site. Used antifreeze is regulated as a dangerous waste.

Special considerations for managing used antifreeze

Used antifreeze must be managed in a way that does not pose a threat to human health or the environment. To recycle the antifreeze:

- ❖ Ensure that used antifreeze is kept in containers that are in good condition, closed, and labeled.
- ❖ Do not mix antifreeze with other wastes.
- ❖ Do not dispose of antifreeze to the ground, sanitary sewer, or storm drain, and do not evaporate antifreeze as a means of disposal.

Where to recycle antifreeze

A list of businesses that recycle used antifreeze in Washington State is provided in the Hazardous Waste Services Directory, publication #98-412. To receive a copy call (360) 407-6752.

Additional Phone Numbers

For additional information on this subject, contact your county or city health department or a Department of Ecology Regional Office**:**

Northwest Regional Office	Bellevue	(425) 649-7000
Southwest Regional Office	Olympia	(360) 407-6300
Central Regional Office	Yakima	(509) 575-2490
Eastern Regional Office	Spokane	(509) 456-2926

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Contaminated Sites and Soils

Reduce the likelihood of soil contamination by working with commercial and residential tenants to properly manage, store, and dispose of hazardous materials and wastes. Take steps to reduce potential liability.

Prevent contamination

- ❖ Minimize the risk of a release to the environment by securing hazardous wastes in containers that are in good condition.

- ❖ Find out if your property is currently contaminated. A brochure entitled, "*Hazardous Waste Considerations in Real Estate Transactions*" includes suggestions for record review, site inspections, and limiting liability and is available from your Ecology regional office.

- ❖ Prevent future contamination by evaluating how tenants handle their hazardous materials and wastes. Establish a formal written agreement between you and your tenants - perhaps a compliance provision in the lease agreement - regarding compliance with hazardous waste regulations.

- ❖ Keep hazardous wastes out of septic systems, storm drains, and sewer systems.

Cleaning up contaminated sites and soil disposal options

The state Model Toxics Control Act sets requirements for cleaning up contaminated sites (see Chapter 173-340 WAC).

- ❖ Sites where contamination is found must be reported to the Department of Ecology within 90 days of discovery. How you handle contaminated soil depends on what it contains and the amount of contamination. Spills or other releases of hazardous substances to the environment must be reported to Ecology within 24 hours. A brochure entitled, "*Reporting Releases of Hazardous Substances*" provides detailed information on this subject and is available from your Ecology regional office.

- ❖ Contaminated soils should be tested. Remediation measures depend on the type and extent of contamination.

Cleaning up contaminated sites and soil disposal options, continued

- Some soils that are mildly contaminated with oil may be used by cement manufacturers or can be disposed of in the dumpster in small amounts. Other contaminated soils or materials cannot go into the dumpster and by law may need to be disposed of as dangerous waste. Consult with a Department of Ecology representative or your county or city health department representative before disposing of contaminated materials.

Who to call

- For private companies that provide soil testing, consulting, and remediation services, look in the yellow pages of the telephone book under *Environmental and Ecological Services*, *Laboratories – Testing,* or *Waste Management*

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- For a technical consultation on options for managing the contaminated materials, consult with the Department of Ecology Regional Offices or your county or city health department.

Washington State Department of Ecology Regional Offices:

Northwest Regional Office	Bellevue	(425) 649-7000
Southwest Regional Office	Olympia	(360) 407-6300
Central Regional Office	Yakima	(509) 575-2490
Eastern Regional Office	Spokane	(509) 456-2926

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Cleaners, Detergents, Disinfectants

Businesses use a wide range of cleaners, detergents, and disinfectants. Some are relatively harmless. Others, such as bleach, can impair biological treatment processes in septic tanks and sewage treatment plants.

Special Considerations for Managing Cleaners, Detergents, and Disinfectants

If you encounter unused cleaners, detergents, or disinfectants:

- ❖ Attempt to find a way to use them rather than dispose of them.
- ❖ Never put them down a septic system, storm drain, dry well, or in the ground.
- ❖ Do not put them in the sanitary sewer system unless you have discussed it with your local sewer agency representative and it meets local limits for hazardous constituents.
- ❖ Consider listing them with the Industrial Materials Exchange (IMEX); call (206)296-4849.

Additional Phone Numbers

For additional information on this subject, contact your county or city health department or a Department of Ecology Regional Office**:**

Northwest Regional Office	Bellevue	(425) 649-7000
Southwest Regional Office	Olympia	(360) 407-6300
Central Regional Office	Yakima	(509) 575-2490
Eastern Regional Office	Spokane	(509) 456-2926

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Used Fluorescent Light Ballasts

Light ballasts are the electrical components at the end of fluorescent light fixtures under a metal overplate. The ballast has a small capacitor that may contain polychlorinated biphenyls (PCBs), a hazardous substance.

PCB Ballasts

Ballasts made before 1978 probably contain oil with PCBs. Ballasts made after 1978 are marked "non-PCB." *Ballasts should not be disassembled.*

Recycle intact ballasts at an EPA-permitted facility. You can ship them yourself, or use a hazardous waste broker to ship them.

Non-PCB Ballasts

Ballasts manufactured after 1978 do not contain PCBs but sometimes contain a PCB replacement called DEHP (di-2-ethylhexylphthalate). DEHP has been classified as a probable human carcinogen. By 1985, most manufacturers stopped using DEHP in ballasts for 4-foot fixtures, but continued using them until 1991 in other fixtures. The safest bet is to recycle all of your fluorescent light ballasts, PCB or non-PCB, with a recycler. If you are confident you have a non-PCB light ballast and you want to dispose of it, call your county or city health department to see if the ballasts will be accepted at the landfill.

Where to recycle fluorescent ballasts

A list of businesses that recycle used fluorescent ballasts is provided in the Hazardous Waste Services Directory, publication number 98-412. To request a copy, call (360) 407-6752.

Additional Phone Numbers

For additional information, contact your county or city health department or a Washington State Department of Ecology Regional Office:

Northwest Regional Office	Bellevue	(425) 649-7000
Southwest Regional Office	Olympia	(360) 407-6300
Central Regional Office	Yakima	(509) 575-2490
Eastern Regional Office	Spokane	(509) 456-2926

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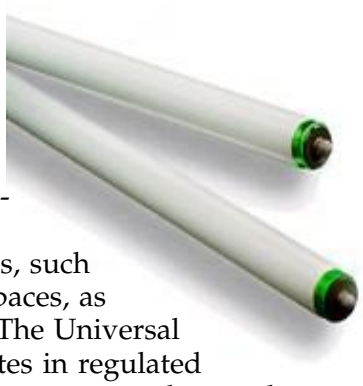
Used Fluorescent Lamps

Fluorescent lamps contain mercury, a federally-regulated hazardous substance. Used lamps are presumed to be dangerous waste unless testing indicates they are not.



On April 30, 2000, Ecology adopted the Universal Waste Rule for dangerous waste lamps. The Universal Waste Rule provides for more streamlined and simplified management of dangerous waste lamps. Dangerous waste lamps are lamps that contain mercury, or other hazardous substances such as lead in the solder and include, but are not limited to fluorescent tubes and compact fluorescents, metal halide, mercury vapor, high pressure sodium and neon. Fluorescent tubes and compact fluorescents are often used to light offices and other large commercial establishments. High intensity discharge lamps, such as metal halide, are often used to light parking areas or other public spaces, as well as in large industrial buildings, such as factories or warehouses. The Universal Waste Rule applies to businesses that already generate dangerous wastes in regulated quantities, or to those businesses that generate enough lamps at one time to cause them to be a regulated generator (approximately 400 four-foot fluorescent tubes will equal the 220 pound threshold for being a regulated generator).

If the Universal Waste Rule for lamps applies to the spent lamps from your property, then you must manage the lamps by sending to another lamp handler, a recycler or a treatment, storage and disposal facility. Please see Ecology's publication Universal Waste Rule for Batteries, Mercury-Containing Thermostats and Lamps for further information. If the lamps from your property are generated below the state regulated threshold (220 pounds), then Ecology recommends that you:

Recycle them

The Washington State Department of Ecology strongly encourages the recycling of fluorescent lamps as the preferred management method. Fluorescent lamps are made of recyclable and recoverable resources, including glass, metal, phosphor powder, and mercury. You can send lamps directly to a company that distills and recycles the mercury.

Properly dispose of them

Some counties may allow fluorescent lamps generated below the 220 pound threshold to be disposed of in municipal solid waste landfills. If a generator chooses to go this route, Ecology recommends that the lamps be properly repackaged or wrapped to minimize breakage. Contact your county or city health department or solid waste agency before attempting to dispose of fluorescent lamps in a municipal solid waste landfill. Fluorescent lamps should never be disposed of to a solid waste incinerator or unlined landfill.

Where to recycle fluorescent lamps

A list of vendors including lamp recyclers that can assist in the management of used fluorescent lamps (as well as ballasts) is provided in the Hazardous Waste Services Directory, publication number 98-412. For a copy of this publication, call (360) 407-6752.

Additional Phone Numbers

For additional information, contact your county or city health department or Washington State Department of Ecology Regional Office:

Northwest Regional Office	Bellevue	(425) 649-7000
Southwest Regional Office	Olympia	(360) 407-6300
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Freon (CFCs)

Freon and other chlorofluorocarbons (CFCs) are used in refrigeration and cooling systems. These gases cannot be vented or evaporated into the air since they damage the ozone layer. CFCs must be recycled, either at your site or by an approved recycler.

- If you use more than one type of CFC, don't mix them together.
- If you do off-site recycling of CFCs used in cooling, you are required to follow hazardous waste transportation requirements.
- If you use CFC-containing solvent, the spent solvent must always be handled as hazardous waste (even when recycled).

How to recycle used appliances

Compressors in refrigerators and other coolers contain oil with CFCs in suspension. This oil must either be reclaimed or handled as hazardous waste. Any company that takes your appliance should properly handle CFCs and compressor oil as well as recycling the metals.

Try to give it away

Sometimes the King County Industrial Materials Exchange can find a company that wants used CFCs. Call IMEX at (206) 296-4899.

Additional Phone Numbers

For additional information, contact your county or city health department or a Washington State Department of Ecology Regional Office:

Northwest Regional Office	Bellevue	(425) 649-7000
Southwest Regional Office	Olympia	(360) 407-6300
Central Regional Office	Yakima	(509) 575-2490
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Leftover Paint

Latex Paint

Leftover paint

- Use up leftover paint for touchups, primers or undercoats. If you can't use it, give it away to someone who can. Nonprofit organizations can sometimes use the paint. List large quantities with King County's Industrial Materials Exchange at (206) 296-4899.

- Some latex paint can be dried in the can or on boards and put in a covered dumpster. House paint manufactured before 1992 likely contains mercury and should be either handled as hazardous waste or tested and cleared prior to disposal.

Paint cans

- Put cans containing non-hazardous dried-out paint and empty cans in the dumpster with lids removed.

Wash-up water

- Put latex paint wash-up water into the *sanitary sewer* (but not the storm drain or septic system). Contact your local sewer utility if you want to discharge large quantities (e.g., 100 gallons) of latex paint wash water.

Water-based specialty paints

- Acrylic latexes, sign paints, and other water-based specialty paints should be evaluated for their hazardous properties before disposal.

Oil-based Paint

Oil-based paints, stains, and thinners are usually dangerous wastes. For these, use a licensed hazardous waste management firm. Some options are:

- ❖ Call paint contractors that may be able to use surplus paints for touch-ups, primers or undercoats.
- ❖ List it with the Industrial Materials Exchange (IMEX). This service is free. Paint listed in the catalog is often wanted by others. Call (206) 296-4899.
- ❖ Check the yellow pages under *Environmental and Ecological Services* or contact a hazardous waste management firm listed in the Hazardous Waste Services Directory available from the Department of Ecology. To receive a copy, call (360) 407-6752 and ask for publication number 98-412.

Additional Phone Numbers

For additional information, contact your county or city health department or a Washington State Department of Ecology Regional Office:

Northwest Regional Office	Bellevue	(425) 649-7000
Southwest Regional Office	Olympia	(360) 407-6300
Central Regional Office	Yakima	(509) 575-2490
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Lead-based Paint

In 1996, the worst case of severe lead poisoning reported to the Center for Disease Control was a residential painter. The follow-up investigation suggested that the primary exposure occurred while the worker used a mechanical sander to remove paint from the exterior of a house. He didn't wear a respirator, and frequently smoked cigarettes while working.[1]

What is the problem with lead-based paint?

Lead poisoning leads to brain damage. Children and pregnant women are most likely to become lead poisoned. Lead paint dust is a primary cause of lead poisoning. Workers who disturb painted surfaces may poison themselves if they are not properly protected, and they may poison children if they do not clean up properly.

Where do you find lead-based paint?

Most housing built before 1978 probably contains some lead-based paint. Homes built prior to 1960 will have even higher concentrations in the paint (as high as 50% lead by weight) than those built between 1960 and 1978. Lead-based paint can also be found in playground equipment, offices, schools, hospitals, bridges, water towers, manufacturing plants, cranes, and boats. House paint manufactured before 1992 may also contain mercury. To find out for sure, the paint must be tested.

Paint containing lead is a problem if it peels, cracks, chips off, or creates dust. Don't dry sand, dry scrape, or burn lead paint. Lead dust forms at friction points on windows (such as window sashes rubbing against the jamb), doors, or stairs. Lead dust can accumulate on surfaces that are difficult to clean (such as under baseboards). Remodeling activities can release accumulated lead dust.

Regulations governing removal of lead-based paint

If you are removing lead-based paint, you need to follow specific requirements to protect workers, residents, children, yourself, and the surrounding environment. The Department of Labor and Industries consultation group can help you with worker safety requirements. For help with lead abatement regulations, health hazards associated with lead abatement, and questions about where to dispose of lead based paint, call your county or city health department.

[1] MMWR, April 25, 1997 Vol. 46/No. 16; p. 360

Paint chips, dust, and paint removal wastes containing lead will likely be regulated as hazardous waste and must be collected for disposal. Contact your county or city health department or the Department of Ecology for hazardous waste management guidance and information about ways to cut down on the amount of hazardous waste generated. Here are a few suggestions:

- ❖ Get the training you need to paint, clean, and remove paint containing lead.
- ❖ Know what you're going to do before you start.
- ❖ Use high efficiency vacuum systems to collect dust.
- ❖ Choose blasting materials that can encapsulate heavy metals.
- ❖ Use paint stripping methods that don't generate dust.
- ❖ Investigate equipment that can remove paint in a totally enclosed system.

Lead-based Paint Removal

Mechanical Operations
Mechanical paint removal operations (such as sanding, scraping, using a needlegun or blasting) create dust, paint chips and spent grit. These methods are not recommended for lead-based paint. Non-hazardous paint chips, dust, and spent grit require a clearance before they can be put in the dumpster or at a municipal landfill. Call your county or city health department for authorization and testing information.

Chemical Stripping
Waste from chemical paint stripping should be handled as hazardous waste. Use a licensed hazardous waste disposal firm.

Hydroblasting and Pressure Washing
Never discharge water from hydroblasting or pressure washing painted surfaces to the ground, the storm drainage system, ditches, into septic systems, or to local creeks, rivers, lakes, or the Puget Sound. Never discharge anything other than uncontaminated rainwater into these systems. You need to collect the wastewater and paint chips.

- ❖ When starting your hydroblasting or pressure washing job, start with a test portion first. Set up tarps, booms, sump pumps or other means to collect all the wastewater from the test. Sample the water, and have a lab analyze it for total metals. Submit the test results to your local sewer or utility district.

- If the test results are within local limits, you may receive a discharge authorization to dispose of the wastewater to the sanitary sewer. The wastewater will need to be collected and separated from the paint chips (see paint chip disposal guidance above).

- If the total metal levels are too high for sanitary sewer discharge, the collected wastewater may be treated to meet the limits (dispose of sludge as hazardous waste). You may prefer to have a licensed hazardous waste disposal firm dispose of it.

- Contact your local sewer utility for more information.

Additional Phone Numbers

For additional information on management of lead-based paint removal, contact your county or city health department, the Department of Labor and Industries, or the Department of Ecology. Refer to your phone book's yellow pages under Environmental and Ecological Services. A list of hazardous waste consulting firms is also included in the Hazardous Waste Services Directory, publication number 98-412. To request a copy, call (360) 407-6752.

Department of Ecology Regional Offices:

Northwest Regional Office	Bellevue	(425) 649-7000
Southwest Regional Office	Olympia	(360) 407-6300
Central Regional Office	Yakima	(509) 575-2490
Eastern Regional Office	Spokane	(509) 456-2926

Labor and Industry Consultation Groups

Region 1	Everett	(425) 290-1431
Region 2	Seattle	(206) 281-5533
Region 3	Tacoma	(253) 596-3917
Region 4	Olympia	(360) 902-5472
Region 5	E. Wenatchee	(509) 886-6570
Region 6	Spokane	(509) 324-2543

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Solvents

Solvents are commonly used in automotive-related businesses to clean grease and oil off of automotive parts. Solvents are used in many other businesses as well for cleaning purposes. There are a wide variety of solvents in use, including mineral spirits, stoddard solvent, petroleum naptha, xylene, methylene chloride, and others. Parts washer solvent tanks are often provided by waste haulers. As soon as the waste hauler replaces the spent solvent tank with fresh solvent, the spent solvent is generally considered hazardous waste.

Special considerations for managing spent solvent

- Used spent solvent must be managed in a way that does not pose a threat to human health or the environment.
- Assume spent solvent is a hazardous waste. Don't dispose of it to drains, the air, or the ground.
- Don't mix solvents with any other wastes, and keep different types of solvents in separate, labeled, closed containers.
- Keep solvents out of used oil.
- Don't evaporate solvents as a means of disposal.
- Prevent spills of solvent. Clean up those that occur and report them to Ecology.

Where to recycle solvents

A list of businesses that recycle waste solvents in Washington State is provided in the Hazardous Waste Services Directory, publication number 98-412. To request a copy, call (360) 407-6752.

Additional Phone Numbers

For additional information on this subject, contact your county or city health department or a Department of Ecology Regional Office**:**

Northwest Regional Office	Bellevue	(425) 649-7000
Southwest Regional Office	Olympia	(360) 407-6300
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Stormwater and Grit

Do you know where your drains go? If not, it's important to find out. Where a drain leads determines what may go down it. Putting the wrong materials down your drains violates the law and may harm the environment and human health. It could lead to costly clean-up, liability, and bad publicity, and it may cause your drains to back up and flood your property.

Identify where your drains lead

- Most outdoor drains, such as those in your parking lot, lead to the storm drainage system. Assume that any outdoor drain is a storm drain unless you can verify that it leads to the sewer, or a combined system that carries both sewage and stormwater run-off.

- Most indoor drains are connected to the sewer, or to a septic system in areas not serviced by the sewer. However, some indoor drains lead to a dead-end sump. Also, some old buildings may have illegal connections that discharge indoor wastewater to a storm drain.

- If you're not sure where your drains lead, check your building's "as-built" plans, if available, or call your local sewer or storm drainage agency for help.

Manage materials near your drain

- Maintain a dry floor and seal off drains where hazardous materials could spill.

- Clean up spills of waste with dry absorbent and place in sealed containers for hazardous disposal.

- Mop water from cleaning can usually go to the sanitary sewer. Check with your sewer authority.

Follow the restrictions for different drains

- The storm drainage system is meant to carry only uncontaminated stormwater run-off, since it conveys the water, without treatment, to rivers, groundwater, and the Puget Sound. Oil, antifreeze, detergents, and other materials should not be discharged to a storm drain.

- The sanitary sewer system carries wastewater to a sewage treatment plant. It still matters what goes down the drain, since the treatment process isn't designed for all pollutants. Certain wastes are prohibited altogether. Check with your local sewer agency before discharging anything down a sanitary sewer other than domestic sewage (wastewater from restroom and kitchen plumbing).

- Septic systems provide on-site treatment and disposal of liquid wastes. Never put industrial wastewater or hazardous chemicals down a drain leading to a septic system.

Maintain the structures below your drains

Most local drainage agencies have specific maintenance requirements for businesses with their jurisdiction.

- Sumps are holding tanks that provide a way to collect liquids, such as washwater or spilled materials. Sumps should not be connected to storm drains or septic systems or discharged to the ground. Sumps need to be pumped out and the contents disposed of periodically.

- Catch basins are located beneath many, but not all, storm drain gates. They are underground boxes designed to pass water through an outlet pipe while trapping sediment that settles to the bottom. The sediment in catch basins needs to be periodically cleaned out in order for the catch basin to function properly.

- Oil/water separators are structures designed to remove oil and sediment from water before the water is discharged to the storm drain or sewer system. Keep the oil/water separator working properly by never dumping waste materials into it. Check the separator regularly to determine a clean-out schedule, and have the unit pumped out when the sludge is six inches deep in the first compartment or if floating oil is in the outlet chamber.

- Detention facilities are structures that temporarily store stormwater run-off and release it at a controlled rate to reduce the chance of flooding and stream-bank erosion. Detention systems need to be cleaned periodically.

Who to call

For additional information about what can be discharged to the sanitary sewer, contact your local sewer agency.

For storm drainage information, contact your city or county government and ask for the department that manages stormwater.

Or contact the Department of Ecology at:

Northwest Regional Office	Bellevue	(425) 649-7000
Southwest Regional Office	Olympia	(360) 407-6300
Central Regional Office	Yakima	(509) 575-2490
Eastern Regional Office	Spokane	(509) 456-2926

The Department of Ecology
Hazardous Waste and Toxics Reduction Program

Property Managers Problem Waste Fact Sheets

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Underground Tanks

There are two types of underground tanks. ***Heating oil tanks*** *contain oil to heat buildings, and* ***storage tanks*** *contain used oil or other substances. Different regulations apply to each. The term "tank" includes concrete sumps as well as tanks built out of steel or fiberglass.*

Heating Oil Tanks

Heating oil tanks are usually 300-500 gallons. As they age, the chance of leakage increases. The failure rate of 40 year old tanks is 80 percent.

Is it regulated?
If the underground tank contains heating oil and the oil is used on the premises where it is stored, the tank is *not* regulated by the Department of Ecology. If the heating oil is not used on the premises where it is stored, call Ecology and ask for an inspector in the Underground Storage Tank program.

Insurance program
The state provides insurance to cover the cost of cleaning up leakage from underground heating oil tanks. In order to be eligible for the insurance, the tank must be in active use and must be registered. Call the Pollution Liability Insurance Agency at (800) 822-3905 for more information. Industrial or production use heating oil tanks aren't covered by the program.

Storage Tanks

If you have an underground tank that stores gasoline, diesel, used oil or other substances, different regulations apply (than apply to heating oil tanks).

Underground storage tanks that store gasoline, diesel, used oil or hazardous substances are regulated by the Department of Ecology *if the capacity of the tank is 110 gallons or more*. Contact the Department of Ecology to obtain a permit to operate regulated tanks and to find out requirements for removal.

Spills

Spills or overfills should be cleaned up immediately. If the petroleum product or hazardous substance comes in contact with soil, groundwater or surface water, the spill must be reported *immediately* to the Department of Ecology. Otherwise, it must be reported to Ecology within 24 hours.

Removal of Tanks

Before removing an underground heating oil or storage tank, check with the local fire marshal. Some cities/fire districts require permits for removal or have other specific requirements.

Call the Department of Ecology for requirements that apply to regulated tanks (USTs over 110 gallons). When contacting the Department of Ecology, request an inspector in the Underground Storage Tank program.

Look in the yellow pages of the telephone book under *Tanks – Removal and Environmental and Ecological Services* and *Waste Disposal – Hazardous* for names of firms.

Additional Phone Numbers

For additional information on this subject, contact your county or city health department or a Department of Ecology Regional Office**:**

Northwest Regional Office	Bellevue	(425) 649-7000
Southwest Regional Office	Olympia	(360) 407-6300
Central Regional Office	Yakima	(509) 575-2490
Eastern Regional Office	Spokane	(509) 456-2926

Leaking Underground Storage Tank Info line. Olympia 1(800)826-7716.

The Department of Ecology
Hazardous Waste and Toxics Reduction Program

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Used Oil

Used petroleum-based oil (motor, hydraulic, gear and lubricating oils) can be recycled by following special requirements of the dangerous waste regulations. It can also be reused as fuel in incinerators and heating units, as long as it doesn't contain contaminants such as PCBs, chlorinated solvent, heavy metals, etc. Some tips:

- Don't mix solvents or other contaminants, including water, with oil.
- Store used oil in separate containers that are marked "Used Oil."
- Use a vendor that recycles the oil according to state requirements.

Storage

Used oil (and Hazardous waste) should be stored in an area with an impermeable floor so that leaks or spills are not released to the environment..

Where to recycle

Refer to the yellow pages in your local phone book. The Department of Ecology also has a publication that lists businesses that recycle used oil. You can request a copy of the Hazardous Waste Services Directory, publication number 98-412, by calling (360) 407-5752.

Contaminated Oil

Used oil contaminated with solvents, sediments, additives, PCB, heavy metals, and/or water may be difficult to recycle. If hazardous waste has been mixed with oil, the mixture must be handled as hazardous waste.

Oil from households

Individuals living in rental homes or apartments may generate uncontaminated motor oil when servicing cars. This oil can be brought to used oil collection centers. Call your county or city health department for more information or location of used oil collection centers.

Additional Phone Numbers

For additional information, contact your county or city health department or the Washington State Department of Ecology;

Northwest Regional Office	Bellevue	(425) 649-7000
Southwest Regional Office	Olympia	(360) 407-6300
Central Regional Office	Yakima	(509) 575-2490
Eastern Regional Office	Spokane	(509) 456-2926